CLAIMS

1. A growing method for pluripotent stem cells, characterized by growing said pluripotent stem cells in a dispersed state while maintaining their undifferentiated state and pluripotency, using a liquid medium and a culturing vessel having immobilized or coated on a substrate solid phase surface a molecule which is adhesive to said pluripotent stem cells, without using feeder cells.

2. A gene transfer method for pluripotent stem cells, characterized by using a liquid medium and a culturing vessel having immobilized or coated on a substrate solid-phase surface a molecule which is adhesive to said pluripotent stem cells, without using feeder cells.

3. The method of claim 1 or 2, wherein the molecule which is adhesive to said pluripotent stem cells is either a molecule that is expressed by said pluripotent stem cells or a molecule that is structurally homologous with said molecule and has homophilic binding ability with said pluripotent stem cells.

4. The method of claim 3, wherein the molecule which is adhesive to said pluripotent stem cells is a molecule belonging to the cadherin family.

5. The method of claim 4, wherein said molecule belonging to the cadherin family is E-cadherin, or a molecule which has structural homology with said molecule, which comprises the EC1 domain and one or more domains from among the EC2 domain, EC3 domain, EC4 domain and EC5 domain of E-cadherin, and which has homophilic binding ability with said pluripotent stem cells.

6. The method of claim 5, wherein said E-cadherin is derived from a mammal.

7. The method of claim 6, wherein said E-cadherin is derived from a human or mouse.

8. The method of any one of claims 1 to 7, wherein the molecule which is adhesive to said pluripotent stem

cells is fused with an immunoglobulin Fc region and is immobilized on said substrate solid phase surface *via* said Fc region.

9. The method of any one of claims 1 to 8, wherein said pluripotent stem cells are mammalian embryonic stem cells (ES cells) or embryonic germ cells (EG cells).

10. Pluripotent stem cells produced by the method of any one of claims 1 to 9.